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Abstract

In an increasingly diverse and digital society, understanding changes in contemporary communication practices that both draw from, and extend beyond, traditional principles of composition serves as an apt construct for exploring the nexus among youth, literacy and technology. This article will examine instances of urban youth exchanges in digital platforms; and, within that, consider the shifting role of authorship and writing among transnational youth. Drawing from a three-year ethnography, attention will be given to digital platforms as sites of their text making and explore how such spaces provide opportunities for social language development. As digital platforms increasingly involve ‘transduction’ and ‘transformation’ (Kress, 2003) of text making, the multimodal means for meaning making and the social factors shaping multimodal ensembles will be highlighted. The analytic approach will combine ethnographic, multimodal and sociocultural theories, method and description for accessing digital data and environments. Findings from this study will be used to explore implications for pedagogically working with students of varied participation backgrounds and to generate curricular potentials that integrate digital tools for developing collaborative and differentiated learning environments.

Keywords:

Urban youth, digital technologies, literacy, transduction, multimodality, ethnography

Introduction

As communication flows continue to move at rapid rates across linguistic, cultural and geographical borders, notions of authorship and composition continue to be redefined and re-imagined (Boulter, 2001; Kress, 2010; O'Halloran, 2010). People, their ideas and their texts are traveling across spaces in unprecedented ways and with this change, an evident shift in communication practices that principally draw on digital devices for making meaning visible to global audiences (Hull, Stornaiuolo & Sterponi, 2013). Text making now includes more possibilities for multimodal integration of words, images, sounds, among other modes in online, screen-based and mobile interfaces (Jørgensen, et. al, 2011; Manovich, 2001; Wilson & Peterson, 2002). With this shift in technological orientation is also an observable social turn in the ways that people are engaging with digital environments (Bachmair, 2006; Kress, 2010; Van Leeuwen, 2004). Take for example current social media practices aimed at widening readership, collaboration and participation across transnational networks. Blogs, websites, and other such professional and personal sites abound that integrate cultural exchanges (e.g., feeds and links that global audiences may use to subscribe for updates). As these examples demonstrate, contemporary literacy experiences are richly laden with human interactions that are often extended through digital environments.

As notions of authorship and composition continue to be redefined in our interconnected world, students are faced with new experiences for communicating across cultures and spaces (Lam & Warriner, 2012; New London Group, 1996). I suggest that adopting technological and social orientations combined with a multimodal perspective provides

new insight for reexamining in-school and out-of-school discourse spaces to find connective overlaps; and in so doing, demonstrate how urban youth movement across these spaces are now more fluid and less bounded than they have previously been discussed. In this article, I broadly discuss literacy research in relation to multimodal communication for theoretical grounding and examine how a group of urban youth engaged in textual making in light of increased ‘transformation’ and ‘transduction’ (Kress, 2003) across digital platforms. Essentially, I seek to explore the transnational flows of language across digital platforms.

Multimodal communication and digitally enabled text making

While recent educational research often discusses literacy practices as shifting with current digital developments (Hull, Stornaiuolo & Sterponi, 2013; Hull & Nelson, 2005; Lam, 2006), the notion of technology as linked with communication is far from being “new.” From hieroglyphics, portraits and murals, paper and ink, and even television and theater, collective knowledge of the human experience has been in many ways an evolutionary process of technologizing scientific, artistic and historical representations of the social world and storied lives of people. This is to say that people use modes for sign making; whether bodily gesture linking speech or emotive countenance resonating thoughts, meaning making is replete with instances of interaction among modes (Bezemer & Kress, 2008; Hull & Nelson, 2005; Kress & van Leeuwen, 2001). Understanding human communication as sign making arises from studies in social semiotics (Halliday, 1978; Kress & van Leeuwen, 1996). This view posits that social and

cultural factors variably influence ways in which people participate in sign making for digital and diverse purposes, and that multimodal meanings are lived practices of sharing ideas, thoughts and texts with the social world (Hodge & Kress, 1998; Kress & van Leeuwen, 2001; Street, 1995). The New London Group (1999) have built on studies of semiotics to call attention to the burgeoning variety of multimodal texts and its confluence with design in an increasingly diverse cultural, linguistic and technological society.

Domingo, Jewitt and Kress (in press, 2014) assert that such shifts in contemporary communication are evident in online writing. In their analysis of food blogs and other online texts, they note how notions of authority and authorship often intertwined in the traditional construction of linear reading paths (e.g., left to right and top to bottom sequencing) are increasingly replaced with more modular meaning making. They posit that with this change, the social power relations inherent in linear textual practices are becoming less prevalent in digital authoring platforms (i.e., online blogging platforms). In other words, visitors to a website must actively select their entry points and call upon their own social interests and cultural knowledge to guide their navigation of online texts. Human communication in this context calls for an understanding of authors designing meanings as a form of cultural remix.

Cultural remix and transnational language flows

Scholars have empirically explored various iterations of literacy practices as departing from the singular standard often prescribed in schooling to more expansive definitions such as those encompassed in studies of multiliteracies and new literacies (New London Group, 1999; Street, 1995). Most notably, these studies often recognize language and literacy practices that involve cultural remix across diverse social and digital spaces (Alvermann, 2008; Lewis & Fabos, 2005; Williams, 2009). Knobel & Lankshear (2008) assert that among the affordances of remix is access to ‘powerful tools’ for digitally making and circulating creative cultural blends (e.g., photoshopping images, juxtaposing anime and manga fan art, as well as hybridizing television, movie and music videos). The multiple language norms and discourse behaviors that people engage in such spaces have been described as generating communication practices that come from a variety of origins both local and transnational (Lam & Warriner, 2012; Madianou and Miller, 2012). Research attentive to cross cultural communication practices also frequently explores changing notions of communities, identities and belonging in the context of globalization (Appadurai, 1996; Dolby & Rizvi, 2008; Ríos-Rojas, 2011). Within this body of work, literacy research has highlighted examples of transnational flows of languages and texts specific to digital environments (Hull, Stornaiuolo & Sterponi, 2013; Lam & Rosario Ramos, 2009). For example, Black (2009) ethnographically documented how transnational youth participation in online fan fiction sites afforded social narrative opportunities for language development, whereby text making involved mixed media genres ranging from anime videos, lyrics of a song, and movie elements, among other cultural materials. This empirical study resonates with other current educational research that explores digital engagement as generative for developing literacies that authenticate

collaborative communicational and professional practices within the framework of popular-culture remix (Buckingham, 2003; Doering, Beach & O'Brien, 2007; Stone, 2007; West, 2008).

In this article, I both draw from and extend beyond current studies of language and literacy in global and digital environments by considering how collaborative text making demonstrates a transnational form of cultural remix. In the next section, I discuss the methodological framework to further map the extent to which cultural remix and transnational language practices are materialised across digital platforms.

Methods

Context and participants

This article draws data from a three-year ethnography focused on examining urban youth language and literacy practices across spaces, both digitally and physically situated¹. My fieldwork traced the movement of my participants, their ideas and their texts across spaces – performance halls, homes, social media platforms, online music forums, among others – to collect semiotic artifacts specific to their social language and literacy development (Dyson & Genishi, 2005). The larger project encompassed learning about their text making practices, which were accounted for in both digital and physical spaces.

¹ The youth in this study composed both online and in face-to-face environments, often moving across both digital and physical spaces to exchange ideas, write collaboratively and design multimodal texts.

As such, data gathered blend traditional composition principles with more digitally enabled text making (see Figure 1).

Digital Platforms	Social Authoring Utility	Multimodal Design Affordances
Facebook	online community based social networking	offers profile pages, videos, images, comments/(re)posts
YouTube	online video based social networking	offers profile pages, videos, comments, user stations
Soundclick	online music based social networking community	offers profile pages, photos, videos, blogs, user stations for streaming and downloading music
Photoshop	digital graphics workstation	graphics editing program for photo editing and storage
Ulead	digital video workstation	video software for visual editing and processing
Cubase	digital audio workstation	audio program for effects editing and instrument processing
FL Studio (formerly FruityLoops)	digital audio workstation	audio program effects editing and instrument processing

Fig 1. The social media sites and digital editing programs the youth used functioned as both social and semiotic resources. Their affordances included collaborative authoring and digitally enabled design of multimodal texts.

The six urban youth featured associate with one another as members of a hip hop production group that includes affiliation with members across London and also various parts of Europe, Asia and North America. The group is drawn together by their affinity for their Filipino heritage and hip hop; they call themselves the ‘Pinoys’. Given the scope of the research, it was necessary to work with participants who are ardent readers, writers and producers of multimodal texts in digital environments. Some were more versed in

specific areas of design or a particular language and this will be demonstrated later in the findings; however, in general, all members worked collaboratively to produce multimodal texts. For this article, I will focus primarily on the digital spaces that the youth engaged to produce their multimodal texts rather than the offline contexts where they also worked. Where necessary to understand the full context of the transnational flows of their social language development and text making, I will also refer to their communication practices in physical spaces.

Data sources

Within digital environments, I identify digital platforms like social media sites, online forums, video and music editing programs as spaces for examining urban youth cultural remix. The digital platforms the youth in this study frequently used (see Figure 2) provided them with modal resources (e.g., video, images, audio, music, written text) for shaping multimodal ensembles that more fully represented and enabled their bridging of cultural and linguistic affiliations across discourse communities. As Kress & Domingo (2013) write, “Digital platforms are sites for text making with and of digitally enabled multimodal ensembles, to shape meanings on the screen.” A predominant feature of text making in digital platforms is the ability to materialize meaning in non-linear configurations (Jewitt, 2002; Mills, 2009; Pahl, 2009). This is to say that sequencing and organization included more than traditional patterns (e.g., left to right or top to bottom) to also include layered, looped and modular navigation. For example, Ulead, Cubase and FL Studio are all digital platforms aimed at providing users with a digital editing

workstation. In this way, authoring texts involves the remixing of images, still and moving; sounds, beats and voices; and words, written or spoken.

Digital Environments

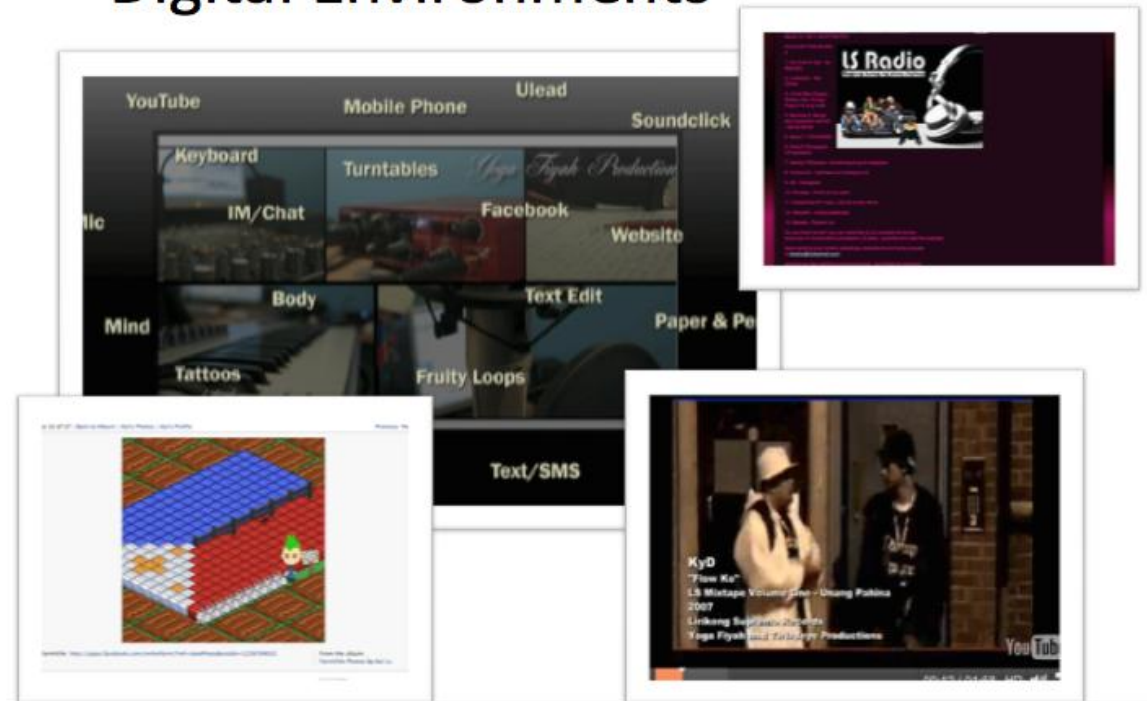


Fig 2. This figure includes a range of the digital environments that urban youth in this study engaged as text making sites. The image on the top left is a screen shot of digital tools that KyD (one of the main participants) often used for text making. It also includes an overlay of written words that describe other inscription tools he has identified as critical to his composing as a lyricist (e.g., his mind, body, Ulead, mic). The other images include samples of their video design on YouTube and also radio podcasts. Lastly, the picture of the Philippine flag is a screen shot from the game Farmville on Facebook. The urban youth often re-appropriate the functions of farming in the game to text making, hence designing cultural texts like the flag in this image.

Methodological framework

Given that text making online and on-screen are increasingly socially networked transnationally, transduction and transformation (Kress, 2003) are apt concepts for examining evolved notions of authorship and composition in digital platforms. This article discusses transduction as naming the process by which meaning is made or translated from one mode to another. For example, when a student moves meaning-material from a visual diagram to a written paragraph. The shift from image to text is a re-articulation of meaning. In examining collaborative literacy practices of urban youth in digital platforms, transduction is a common practice involved in cultural remix. For example, one of the participants named Aziatik translated the lyrics from his song 'Pinoy Ako' [*I am Filipino*] into a musical composition. Transduction involved the primarily written mode to include sound, rapped lyrics and musical beats. Further, analyzing Aziatik's process of transduction involved seeing the relations among images, gestures, sounds and words and this was made visible through a color-coded transcription and developing a transcription key. In this example, the written mode was transduced to the modes of sound and music, a multimodal ensemble that included auditory performance alongside beats in music. In later iterations of this same text, Aziatik also translated the work from Tagalog to English in a video performance. This process names another form of translating in text making. It describes the re-ordering of elements in a semiotic representation but still in the same mode, whether within the same culture or across cultures.

For Kress (2010), transformation names a less far-reaching process of translation than transduction. A student translating a passage of a novel from one language to another

would be an example of transformation. Transformations also include a change from one genre to another or one discourse to another, while still using the same mode and often in a different arrangement (e.g., student outline notes transformed to an extended course paper and later a journal publication). In this sense, when Aziatik moved from the audio recording of the song to the video production, there was both a transduction and a transformation of meaning through his use of digital platforms. The findings will further illustrate how such text making processes involve transnational language exchanges in digital platforms and make evident shifting notions of authorship and composition.

Multimodal analysis

While transduction and transformation are concepts that can begin to account for how the urban youth in this study were making meaning across digital platforms, a multimodal analytic approach makes it possible to view how they are materialized. Within the digital platforms, analysis of text making necessitates accounting for not only which modes are used but also the affordances of these modes as a multimodal ensemble. A multimodal analytic approach makes discernible the inextricable relations among modes involve the use of color-coding modes during the transcription process (Domingo, 2012). This visual mapping illustrates how certain modes are fore grounded in particular text making practices and also in specific digital platforms. Further, this color-coding reveals the affordance of each mode in terms of its function within the ensemble.

Another analytic approach that illuminates the significance of multimodal ensembles is mapping the spatial and temporal reading path of digital data. This approach was previously applied to digital video design (Domingo, 2011). A multimodal transcription frame allows for both a linear/temporal and a layered/spatial reading of the video data. Each transcription frame comprises three logics of organization. First, a *title bar* is assigned to a clip (title of the video), theme (main topic), and segment (time frame) of study. Second, a *body frame* is developed to account for each mode utilized in the particular segment and to display still shots of images from the video. Third, a *narrative description* is written about the segment to link the transcription with related reflexive notes, interviews, and observations. This last step is critical for linking each segment of video analysis to the overall textual product, as well as to previously collected data. The multimodal analyses key, which identifies each mode by color, was used not only in the body frame but also in the narrative description.

The digital data and environments to be analysed in this article adapt these two multimodal approaches to harness online and screen-based texts, both in terms of form and content. The findings highlight distinctive cultural remix features of the Pinoys' text making including the ways in which the platforms enabled their meaning making to migrate across various digital and physical spaces. As digital platforms increasingly involve transduction and transformation (Kress, 2003) of meanings in text making, the social shaping of technology will be highlighted in the analysis to demonstrate the ways in which transnational language flows are exchanged through the Pinoys' technological and social uses of digital platforms.

Findings

Multimodal affordances and collaborative authorship in digital platforms

On one level, the affordances of multimodal design within the digital platforms are primarily a *technical orientation*. Observations of the youth made visible their proficiency in the particular functions of the digital platforms to effectively and efficiently produce a text. For example, learning how to compose by layering various sounds in Cubase and FL Studio (e.g., rapped lyrics with sounds effects of harps, strings, piano) created rhythmic patterning that is not only audible in the final music file but also visible through the edit view of the digital workstations. The technical orientation of the digital platforms informs a different kind of meaning making not reliant on traditional linear organization of written text (Kress & Domingo, 2013). The youth had to learn the function of the digital platforms in ways that would enable them to configure modes using sequencing such as layering and looping.

Given the extensive technical features of the digital platforms, each of the youth in this study developed a preference or proficiency in one or two digital platforms more than others. KyD was versed in Cubase and Ulead. Aziatik often used Photoshop and FL Studio. KidCras also used digital editing programs for both audio and graphics but he was known among the group to design clothing and accessories. The other youth also had particular areas of ‘expertise’ when they were producing music, and these areas often

moved beyond digital text making and into more physically embodied representations. PinoyAko was known in the group to be most versed in writing and singing the coro [*chorus*] and Lucky QBall was often the lead in interviewing Filipino hip hop artists for their LSTVUK series, which appears on their YouTube channel. Similarly, TMax was known as the being an expert at the turntables and he often took charge of digitally remixing the beats during live performances. In this way, text making is a process that moves across spaces both digital and physical and draws on a range of modes for making meaning. As a group, the youth had a diversity of interests and displayed strengths in representing multimodal meaning making by using a variety of modal configurations (see Figure 3).

Key Participants	Literacies [†]	Languages [‡]
Aziatik	a, b, c, d, e, f	1, 2
Kyd	a, b, c, d, e, f	1, 2, 3
Lucky QBall	a, b, d, e, f	1, 2
TMax	a, e, f	1, 2
DRexx	a, e,	1, 2
KidCras	a, b, c, d, e, f	1, 2

† Literacies
a. Lyricist (composing, rapping)
b. Videographer (filming, editing)
c. Visual Designer (correspondences, flyers, clothing)
d. Musical Producer (beat-making, recording, editing)
e. Performer (emcee, rapper)
f. Manager (publicity, marketing)

‡ Languages Spoken
1. Tagalog
2. English
3. Spanish

Fig 3. This table shows the six main participants involved in this research and the focus on their distinctive uses of languages and literacies for collaborative authoring in their

hip hop group. It also features their areas of specialization for multimodal text making across digital and physical spaces.

Given their varied interests and proficiencies, remixing of modes to express their diverse discourse affiliations is most salient through their materialized multimodal texts (e.g., music, videos). At the start of this article, I discussed the synergies between technology and multimodality as having been an ongoing process of human communication for shaping meaning. For the youth, these synergies are enabled through collaborative authorship that spans across digital and physical spaces.

The youth use a range of tools for collaborative authorship. For each of the six participants, ‘voice,’ ‘mind’ and ‘body’ are central for shaping multimodal texts. These physical attributes enable their shaping of digital platforms for social purposes. They also use other more commonly described tools for authorship such as pen, paper, or TextEdit on the computer. There were also less common tools during the time in which this study was conducted but now more common features in our contemporary society; for example, the use of their mobile phones to compose lyrics and develop rhyme patterns. The immediacy of this tool allowed them to send the lyrics to one another and compose collaboratively even if they were not physically gathered in one place.

As evidenced by the range of tools they used, collaborative authorship involves both a proficiency in technical functions of digital platforms and shaping technologies for social purposes (Domingo, Jewitt & Kress, in press, 2014). For example, they often

collaborated with transnational youth who were proficient at making beats. Sometimes the beats makers are in London and meeting face to face was easier to arrange. In these instances, the literacy exchange often meant gathering in one place and the Pinoys sharing the lyrics to the beat maker. As a group, they would make purposeful choices for the type of beat required to attend to the social purposes of the piece. Other times, the literacy exchange would transpire online because the beat makers would be residing in other parts of the world. In this case, extra or more frequent uses of digital platforms would be necessary for collaboratively designing the multimodal texts (e.g., using instant messenger to relay mp3 files of music and rapped lyrics while simultaneously chatting on-screen about how to remix the composition). In both exchanges, I define the affordances of multimodal design as having a more *social orientation*. Aziatik explained the choice for juxtaposing of ‘deep lyrics’ with ‘catchy beats.’ As he states, “We want kids to listen. They don’t always listen to what we’re sayin when the beat isn’t catchy.” In this way, choosing a beat to fit the lyrics is not merely a technical endeavor of making meaning and configuring modes but also a conscientious effort in shaping technology to achieve social purposes. This is evident in many of their songs but particularly for lyrics that have a political message, and the complexity of what they are expressing is often remixed with a familiar or ‘catchy beat.’ In the following section, I will further discuss this process in relation to transduction and transformation (Kress, 2003) of meaning across digital platforms, and how such migrations foster transnational language flows.

Cultural remix and transnational language flows

In my research of the urban youth, a prevalent aspect of cultural remix that emerges involves the shaping of writing for transnational communication in digital platforms. The rap song, ‘Kapag A’koy Bumabalik’ [*When I return*] by KidCras and KyD is a prime example of how transcultural language flows are materialized in multimodal ensembles across digital platforms. It was first composed as written lyrics and later transduced into a rap song, before it eventually was transformed into a music video. In this way, the mode of written text was configured into an orchestration of modes as it was shaped by the youth across physical and digital spaces. As the text moved across digital platforms, there was both a transduction and transformation of meaning (Kress, 2003). This pattern of migrating multimodal text making and design across digital platforms and physical spaces became apparent through the course of the three-year ethnography (see Figure 4).

Transnational Language Flows and Multimodal Text Making Making in Digital Platforms

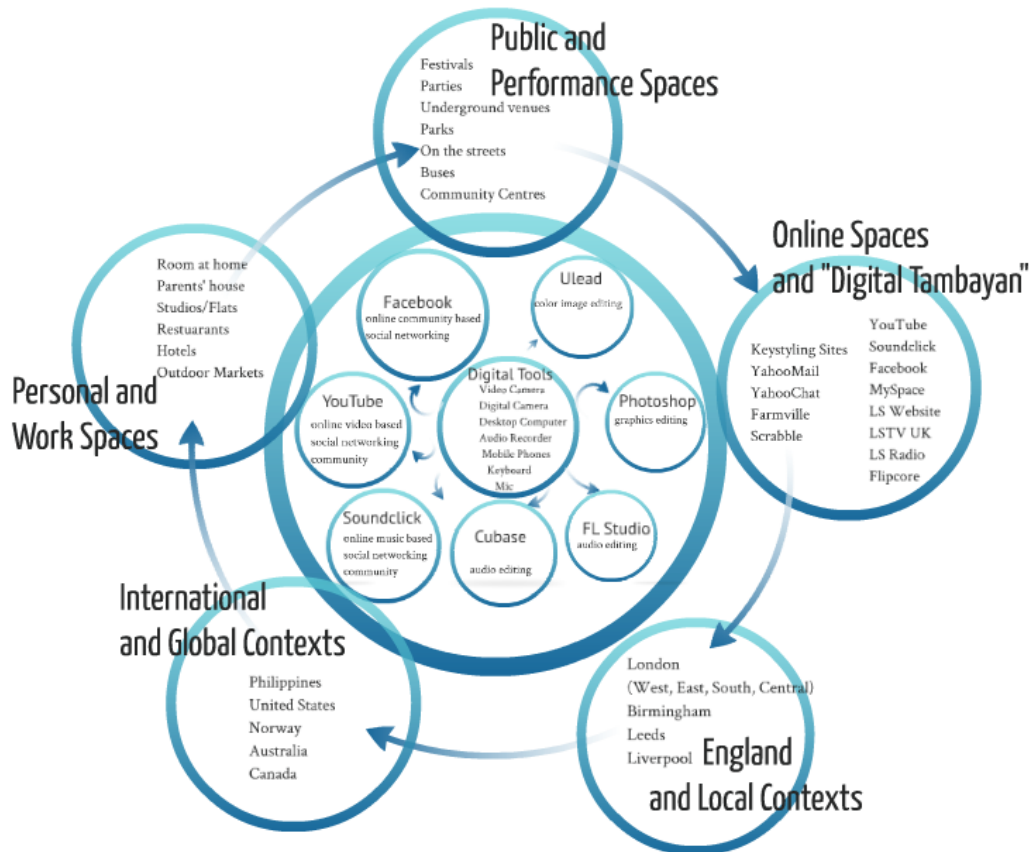


Fig 4. This figure illustrates the digital tools and digital platforms the youth engaged for shaping technology to achieve social purposes. Transnational language flows and literacy exchanges were among the affordances of text making across the detailed digital and physical spaces. The migration of the youth and their texts were more fluid and less bounded across the social, cultural and linguistic spaces; demonstrating language and literacy practices that could attend to belonging across discourse communities.

Their text making often began with the *use of digital devices* selected for the particular text to be constructed. For a music video like Kapag A'koy Bumabalik, the choices for digital devices include video, camera, mobile phone, microphone and desktop computer. However, recording audio would mean selecting other relevant tools such as audio recorder, microphone and desktop computer. The next step involves *migrating to*

physical spaces where the video or audio recording would be captured using the digital devices (See Figure 4). Some spaces are public or performance venues, other times these spaces are more personal in scope such as in the homes of the youth. Other spaces include international sites, most commonly the Philippines. The youth have also spent time performing at locations throughout England such as Birmingham and Leeds. The youth would also capture video footage of the group or specific members rapping ‘in situ’ including performing at public city spaces or still shots of sights that they consider as potential backdrops for videos or other online texts. In this way, their composing of multimodal texts was a constant part of their daily activities. For example, they had an impromptu filming while traveling to a birthday gathering. They saw graffiti and noted how it would be an ideal backdrop for the music video. All those in attendance, a total of approximately 15 youth, stopped and participated in filming. Some played the beat on their mobile phones to keep the rappers in rhythm. Three video cameras were used for various footage and mobile phones were also used to take still shot images and also for extra lighting. Whether planned or in situ, the youth also called upon the use of digital devices to capture their performance across these sites and either *digitally archive* (i.e., external hard drives) for future use or *digitally export* the captured video or audio footage to digital editing workstations (e.g., Ulead for video, Cubase for audio).

Cultural remix of multimodal ensembles

In the music video for Kapag A'koy Bumabalik, it is possible to view how KidCras used Ulead to produce an assemblage of video footage captured across different spaces. The public spaces here include iconic and historic sights such as the Andres Bonifacio

Monument in Manila and Westminster in London. He also assembles footage of people from the Philippines, showing poverty and protesting in the streets. In London he highlights footage of himself and KyD rapping in front of Big Ben and the London Eye. These moving images are multimodally configured to the beat of the music as well as to the lyrics of the song (See Appendix A). Gestures in the video are also used to signal meaning making and emphasis of certain words and concepts within the video, such as the tapping of the hand to the chest to indicate the words *loob [inside]* and *pakirandam [feeling]*. Micro-analytic approaches reveal how the multimodal ensembles for this video text made prominent use of colors (e.g., clothing and accessories of the youth are colors of the Filipino and British flags or represent their hip hop affiliation), frames (zooming in and panning out to capture landscapes and portraits of people), rhythm (shots various film footage corresponds to the beat of the music) and written texts (visual effects of words appearing on the screen and inscription on the clothing they designed and wear for the video).

Their digitally enabled text making is an ongoing process that involves continued reshaping of multimodal ensembles across spaces. For example, the clothing and accessories they wear in the music video have direct correlation to the lyrics they are rapping. Yet, such choices in performance wear although could not have been possible without the youth first shaping the logos and typography in digital platforms. They are materialized as a multimodal text in this video; however, the various modal representations that appear have undergone significant transduction and transformation as the youth designed and remixed them prior to the filming of this video. Drawing from

hip hop and Filipino culture, the chain that KidCras wears is a reminiscent of the Philippine flag. It has three stars and a sun as the plate and blue, white and red beads as the chain. The inscriptions on the shirts that KidCras and KyD wear in the video function like tagging in hip hop and reads, 'Flow Ko' [*My Flow*], and 'Lirikong Supremo' [*Supreme Lyrics*], 'Pinoy Ako' [*I am Filipino*]. Much like graffiti artists making meaning using visual and linguistic expressions for a mural, this particular video makes meaning also by using both modes. Similarly, just as graffiti artists leave their mark by tagging their work, KidCras and KyD are tagging their multimodal texts. Given that their texts are an assemblage of several multimodal ensembles, tagging works on several levels given the transduction of modes across the digital platforms. Their clothing designs are tagged on their shirts. The same tags on their shirts are also used in their lyrics, which in this video serves as tagging the music. In the video, the appearance of both written and spoken tagging serve to identify the music video design as their artistic work. Like graffiti, the music video as multimodal text is a graphic and linguistic display of the political and social commentaries the youth are making about their heritage, country and sense of global belonging. The analysis takes into consideration that the youth in this study appropriate linguistic exchanges online and on screen with an awareness of language as historically fraught with social, political, and cultural narratives (Brutt-Griffler, 2002; Nero, 2006). The video also addresses audiences at a more local level, aimed at other hip hop groups in London that imitate their style. In this way, the text also functions as a battle verse and the youth are upholding their place as performers among the hip hop community (Alim, 2006). Their meaning making configures spoken, written and visual modes to correspond and amplify the meanings of the lyrics (see Appendix A).

Shaping digital platforms for transnational audiences

The Pinoys' collaborative authoring and multimodal text making shows how their linguistic identities are materialized using technological, social and semiotic resources. Among the ways that such social relations have been theorized is through signaling of language loyalty through acts of affiliation and inheritance (Rampton 1995). As Rampton (1995: 342) states, "...*affiliation* refers to a connection between people and groups that are considered to be separate or different, whereas *inheritance* is concerned with the continuity between people and groups who are felt to be closely linked." For example, as the Pinoys' transnational community became increasingly complex in its linguistic identities ranging from Tagalog, British English, Spanish, among other languages they used in conversation with youth around in other parts of the world and also in their musical compositions, they were faced with new challenges about integrating discourses to represent their belonging across communities (Dolby & Rizvi, 2008; Ríos-Rojas, 2011).

One way the youth addressed this challenge is by reshaping the use of Facebook, YouTube and Soundclick to function as a social authoring utility for sharing their collaborative multimodal designs to a range of audiences. The youth specifically described their use of social media, digital technologies and hip hop for reaching other youth who they may not otherwise be able to meet. As such, socially reshaping these digital platforms enabled the youth to share their music with transnational youth, with most Filipino youth engaging with them from parts of Europe, Asia and North America.

In this sense, their aim was to develop a sense of belonging not founded on the premise of reaching local networks but more global alliances. Given that the digital platforms of Facebook, YouTube and Soundclick are aimed primarily at increasing social networking to other related networks, they provided a different kind of social and semiotic affordance for the youth than their typical users. A detailed example will be provided later in this section to explain this process; however, it is significant to first explore the potentials and constraints of text making within these social networking platforms.

Unlike the digital platforms of Ulead, Photoshop, Cubase and FL Studio, these social networking platforms are more constrained in terms of layout potentials. This is to say that customization of a multimodal text is not a prominent design feature. For example, still and moving images, written texts and audio files could be uploaded; however, the ability to manipulate the layout is more or less fixed given the standardized template. Fonts, frames, colors are also invariably limited. For the youth, this meant harnessing the limited technical orientations and finding ways to shape them to achieve their social purposes, namely to reach a wider network of transnational youth who do not always share their linguistic and social backgrounds. In terms of shaping multimodal ensembles that carry cultural significance, the challenge these social networking sites presented to the youth is how to customize and personalize multimodal texts without the affordances of digitally enabled text making like those featured in Ulead, Photoshop, Cubase and FL Studio. To overcome the technical constraints of social networking sites, multimodal text making for the youth had to *migrate* across physical spaces and digital platforms (see Figure 4). The youth achieved this through transduction and transformation of social and

semiotic resources for shaping multimodal ensembles first using the digital editing platforms (Ulead, Photoshop, Cubase and FL Studio) and then uploading the multimodal texts on the social networking platforms (Facebook, Soundclick and YouTube). It also meant traversing physical spaces to design multimodal ensembles that could be captured on video and uploaded onto the digital platforms. In what follows, I describe this process more fully and also explore how transnational language flows became a part of such collaborative multimodal text making.

'Digital Tambayan' [Digital Hangouts] for transnational youth

To reach transnational youth networks, the Pinoys offer a range of ways for 'entering the text' and becoming a part of their community. For example, the mp3 file for Kapag A'koy Bumabalik was uploaded on Soundclick. The music video was uploaded on YouTube and Facebook. The youth also promoted and circulated the music by writing, posting and re-posting comments about the video and music on the social networking sites. They used the digital platforms of Facebook, Soundclick and YouTube as community spaces with the knowledge that transnational youth spend considerable time in these online sites. The Pinoys referred to some of their online spaces as 'Digital Tambayan' *[Digital Hangout]*. In this way, uploading their multimodal texts and circulating them across the digital platforms enabled the formation of digital communities, where transnational youth engaged in literacy exchanges. Much like youth hanging out in physical spaces, the interactions in these sites involved a range of communication practices. The conversations that ensued through comments in these platforms demonstrate how the Pinoys were reaching a wider audience as intended. On

YouTube there are a total of 87,722 views and 136 comments for the video. The feedback they received included youth that are a part of their group in London and also transnational youth from countries like United States, China, Sweden, Philippines, Switzerland, among others. Comments range in scope from praise of the video, affirmation of the political message, general approval of the music, as well as more specialized commentaries focused on the historical sites featured and their clothing design. There are also questions raised about translation of the lyrics and explanation of its meaning as well as queries about how to download the video and music.

Shaping the semiotic resources of networking platforms like YouTube for social purposes enables the youth to engage with a transnational audience about the history of their country, their linguistic affiliations and their cultural heritage. In this way, their multimodal texts function as both entertainment and educative texts for global audiences (Alim, Ibrahim & Pennycook, 2009). The meaning making they inscribe using digital platforms permitted sharing of language and literacy practices. As evidenced by the comments on YouTube, youth around the world are made aware of political, social and cultural ideas. The Pinoys sometimes reply publicly by posting a comment; often times, they reach certain audiences directly using other digital platforms for a private reply. There are also conversations that ensue among transnational audiences. Further, these connections in social networking sites often extended the Pinoys' connections with youth in other digital platforms. In some instances, the exchanges moved beyond emailing or chatting to also include collaborations on music productions. These language and literacy

exchanges demonstrates how the Pinoys' shaping of multimodal texts in digital platforms help to build digital communities that span global contexts.

In addition, social language development is a recurrent thematic finding that results from analysis of their literacy exchanges across digital platforms. Both the Pinoys and their transnational audiences are interacting using a range of modes for differentiation, allowing access to meanings and meaning making that include various learning styles. The ability to enter the *Digital Tambayan* across digital platforms enables youth to hear, see and read about the social and cultural topics discussed. During the three-year ethnography, it became apparent how members of the group learn new vocabulary by participating in digitally enabled multimodal text making. The active shaping of words into multimodal ensembles across spaces often involved repetition and modeling to configure a coherent text for public circulation.

As the findings demonstrate, text making among the urban youth in this study remixed language blends into multimodal ensembles to more fluidly communicate their belonging within and across discourse communities (Rampton, 1995). In the analysis, emphasis was given to understanding the fluid movement of language and cultural knowledge across digital platforms. Their design of multimodal texts was often characterized by a sense of global connectedness given the range of ways in which they extended their use of digital technologies to also include more social media practices for reaching transnational audiences.

Conclusion

As the urban youth in this study make visible through their distinctive transnational affiliations, authorship and composition are increasingly becoming an inherent aspect of communicating online and on screen. The findings in this study demonstrated how the digitally enabled text making of the urban youth and their use of digital platforms materialized meaning and social relations for wider communication. Further these findings are apt extensions of multimodal research for schooling purposes. The various ways in which the Pinoys shaped multimodal ensembles using digital platforms are prime examples of how technology could be integrated for curriculum design that extends meaning making potentials using a range of media and collaborative literacy practices.

Kress (2010) articulates that in viewing technologies as a cultural resource, schools and other learning institutions should invest in better understanding the communicational and pedagogic affordances of such devices to carry out perceived specific social aims for education with regards to assessment, curriculum and instruction. Among the aims he stresses is for learning institutions to prepare students to more aptly inhabit an adaptive disposition for multi-tasking, text making and communicating across contemporary media. Thus, schools must be adept at teaching ‘navigational aids’ for working with semiotic artefacts, which are increasingly a part of our communication landscape. In this way, students are able to execute innovative, reflective and confident representations of their learning.

Similarly, designing meanings using a range of representations and a multiplicity of discourses characterize the notion of ‘productive diversity’ that The New London Group (1996) identify as a critical component of living in a globally and technologically connected society. “Effective citizenship and productive work now require that we interact effectively using multiple languages, multiple Englishes, and communication patterns that more frequently cross cultural, community and national boundaries” (p.64). From this perspective, productive diversity draws on students’ cultural and linguistic differences for shaping schooling experiences responsive to the changing social and technological landscape. In what follows, I extend the discussion about productive diversity and offer curriculum design potentials of digitally enabled text making for attending to differences. Pedagogical reflections are offered to further illustrate how the findings in this research are relevant for developing community of practices that include differentiation and collaboration among diverse learners.

Differentiation through digital platforms

A recurring observation of the youth learning the technical orientation of digital platforms demonstrated a differentiated approach to learning. It was not uncommon for the youth to learn how to use the digital platforms by playing with the technical features at the same time that they used YouTube as a search engine. They would also use Google to type key terms relevant to their learning of a particular digital technology and then select documents to read that were most suited to their preferred style of accessing relevant information (e.g., bulleted explanations instead of long paragraphs, still shots of images instead of written texts, videos with audio and visual instructions). For KyD,

“seeing how it’s done” is more important than ‘hearing’ a chronological sequence of instructions. Whereas for Aziatik, “seeing” and hearing the instructions in English or Tagalog were preferable.

Bridging discourse divides through multimodal design

This movement across digital and physical spaces illustrates how digital technology use for the youth was not disparate from their social lives or from their every day literacy practices, making binary terminology phrases such as the ‘virtual’ and ‘real’ world no longer fully captures their fluid movement across online and offline spaces. In a follow up interview with KyD at the end of this research, he described how his participation in the hip hop group helped him “do better in school.” He explained how he learned to search for instructions online and select texts that could more fully articulate concepts that he did not understand during a lecture in class. “Sometimes the teacher talks but doesn’t show how to do something...” and he goes on to explain how visuals enable him to better understand what is being taught, which he is able to achieve by accessing online texts like he used in the hip hop group to search for more visual explanations of concepts he was learning in school. He also learned to adapt this differentiated method to search for books that are not selected by the teacher for the class but that he considered more suited to his learning style. Often the non-fiction books he selected were still reliant on a traditional reading path, primarily left to right and top to bottom in sequencing. Further, they often have minimal diagrams or images and relied on heavily on the mode of the written word for conveying meaning. Yet, the difference in accessibility for KyD was represented in the writing style of the author for explaining challenging concepts using

language that minimized the use of jargon and maximized formatting and layout design to emphasize key ideas more clearly (e.g., fonts, text boxes, framing). While such choices in formatting and layout are multimodal (Bezemer & Kress, 2008), the means by which they are delivered in the books do not readily take on the more modular approaches often materialized in online and digital environments that KyD regularly used in out of school contexts.

As KyD and the other youth in this study made evident, authoring in digital environments draws upon design as a means for composing multimodal ensembles, whereby texts are remixed to embody cultural significance. Beats they created in such digital platforms are often a remix of sounds, lyrics and music that integrate their relationships across the discourse communities of Filipino, British and hip hop culture. In many instances, KyD blends British grime with Tagalog lyrics. Similarly, Aziatik blends Filipino ballads and folk music with hip hop lyrics relevant to British youth. Over time, it was possible to discern the range of their discourse affiliations materializing in their remixed multimodal texts. As explored through KyD's particular experience in schooling, remix also encompassed combining the social world on the screen with physical environments. There is a more open flow of using communication, composition and multimodal design principles that bridged across the delineated boundaries of school and out-of-school contexts. Through this bridging of discourses, youth like KyD are better able to access information and thrive in learning environments that are often challenging for youth not versed in traditional principles of composition and the primary mode of written words for

conveying meaning. In what follows, their meaning making is further examined by mapping the affordances of digitally enabled and collaborative text making.

Designing collaborative authorship models

Pedagogically, an understanding of cultural remix and collaborative authorship are of value to educators designing curriculum for diverse youth and varied learners. It takes into account that digitally enabled multimodal ensembles are first socially shaped before they are materialized on the screen. Authorship and texts in this sense moves beyond traditions of reading and writing to also encompass interactivity among transnational youth, their multimodal texts and their use of digital technologies. In the context of contemporary communication and as materialized in digital environments, the youth and their engagement of multimodal texts calls forth an understanding of literacy that is alive in social interaction. It is most eloquently expressed in a definition of literacy that Barton and Hamilton (1998) posited,

Literacy is primarily something people do; it is an activity, located in the space between thought and text. Literacy does not just reside in people's heads as a set of skills to be learned, and it does not just reside on paper, captured as texts to be analyzed. Like all human activity, literacy is essentially social, and it is located in the interaction between people. (p.3)

In this way, it is possible to view the social interaction of the youth in the hip hop group as organizing belonging through shared linguistic and cultural identities but also through developing shared literacy practices. Canagarajah's (2006) asserts that youth belonging could be understood in terms of *communities of practices*. This definition of belonging

contends that membership is conferred not by unifying discourses or homogeneous identities; rather members gather together because they share similar objectives that enable participation in joint projects (Lave & Wenger, 1991; Prior, 1998). In a classroom environment that joins youth of varied participation backgrounds, educators could use extended notions of belonging to form more collaborative learning environments that capitalize on diverse skills set and multimodal outputs for lesson objectives. Such a view departs from forming groups primarily through similar linguistic or ethnic backgrounds and instead challenges youth to achieve particular tasks by drawing on their differences to more fully attend to the solving a problem or producing collaborative writing. This model of learning requires moving beyond developing discrete tasks for each member of the group to perform. Rather, each member collaborates and communicates with one another to complete the task or project at hand.

As classrooms and city spaces continue to diversify with the multiplicity of linguistic and cultural voices, schools are faced with challenges of working with students of diverse participation backgrounds. The youth in this study who were most adept at bridging the discourse divides were keenly strategic in their use of digital devices and artfully rendered their text making within and across digital platforms as a social shaping of technology. They adeptly shaped modes to embody cultural significance for reaching transnational audiences and adapting contemporary communication innovations in online contexts to better navigate their lived social worlds. Insight into their appropriation of digital technologies as a linguistic, social and semiotic resource serves as a paramount example of how youth today, like those in this study, are harnessing digital environments

as collaborative learning spaces, and in so doing, foster new ways of developing social language and literacy relevant in our increasingly global and digital world.

Note: The methodological framework for researching online materials in this study was adapted from a collaborative project at MODE (Multimodal Methodologies for Researching Digital Data and Environments), a node of (the ESRC funded) NCRM: “Using multimodal and narrative approaches to study food blogs: stories about food, mothering and fathering.” It was developed in partnership with Gunther Kress, Carey Jewitt and Elisabetta Adami.

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Appendix A

Kapag A'koy Bumabalik Lyrics*

Intro, Kid Cras:

Hey yo, this is KidCras

Back in the Philippines

Oh Yea shouts to Francis M

Check this out, alright

Lirikong Supremo, Check it out

Chorus, KidCras and KyD:

Masarap ang pakirandam kapag a'koy bumabalik (bumabalik)

Makikita ang lugar kung saan ko nakuha ang aking katapangan

Ang loob ko ay lumalakas kapag akoy bumabalik (bumabalik)

Daladala ko sa puso ko ang aking bansa kahit saan makarating (kahit saan makarating)

Translation

It makes me feel good whenever I return (return)

See the place where I learned to be courageous

I get stronger within whenever I return (return)

I carry my country in my heart no matter where I go (no matter where I go)

1st verse, Kid Cras:

Back in Manila from London

Jump off the plane, touch down

Kamusta ka, yeah I'm back again

With a fresh style, not one of the best style

But bet I'll still be standin on feet on the next round

Like Pacqiauo, this kid is a killa

Yea, the modern day thrilla in Manila

I set trends of my own, but don't copy it,

So many of your shirt designs are whack and that's obvious

2nd verse, Kid Cras:

Three stars and the sun yeah, I'm reppin it

You ain't really representin, you disrespectin it

I'm proud of my country but ain't proud of the government

The cops are corrupt and the system disfunctionate

How can our nation not solve the situation

Survivin everyday over minimum wages

But this is my country, I will rep til the death of it

Put the flag in the air if you're proud of your heritage

Chorus, KidCras and KyD:

Masarap ang pakirandam kapag a'koy bumabalik (bumabalik)

Makikita ang lugar kung saan ko nakuha ang aking katapangan

Ang loob ko ay lumalakas twing akoy bumabalik (bumabalik)

Daladala ko sa puso ko ang aking bansa kahit saan makarating (kahit saan makarating)

* I take responsibility for the transcription of the lyrics from the music video and do not associate any potential errors in translation to the youth in this study.

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